

Mr. Jeff Schultz  
Doorcraft of Indiana  
2526 North Western Avenue  
Plymouth, Indiana 46563-1000

Re: 099-12904-00004  
Third Administrative Amendment to  
Part 70 T099-6061-00004

Dear Mr. Schultz:

Doorcraft of Indiana was issued a permit on February 15, 2000 for a stationary plant to mill and surface coat wood doors. A letter requesting a boiler change was received on October 31, 2000. This modification of an existing source consists only of a natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Pursuant to 326 IAC 2-1.1-3(d)(5)(A)(i), the modification requirements under 326 IAC 2-7-12 and 2-7-10.5 do not apply.

The one (1) 3.3 mmBtu per hour natural gas fired boiler, is subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, the one (1) 3.3 mmBtu per hour natural gas fired boiler (constructed after September 21, 1983) is limited by the following equation from 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = maximum allowable particulate matter (PM) emitted per mmBtu heat input  
Q = total source max. indirect heater input = 3.30 mmBtu/hr

$$Pt = 1.09/3.3^{0.26} = 0.799 \text{ lbs PM/mmBtu}$$

However, for Q less than 10 mmBtu/hr, Pt shall not exceed 0.6. Therefore, the one (1) 3.3 mmBtu per hour natural gas fired boiler is limited to 0.6 lb/PM per mmBtu.

compliance calculation:

$$(0.03 \text{ tons PM/yr}) * (\text{hr}/3.3 \text{ mmBtu}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.002 \text{ lbs PM/mmBtu}$$

Actual lbs PM/mmBtu (0.002) are less than allowable lbs PM/mmBtu (0.6), therefore the one (1) 3.3 mmBtu per hour natural gas fired boiler will comply with the requirements of 326 IAC 6-4. (see App. A, page 1 of 1, for calculations)

Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

1. The expiration date has been added to the signature box.

Operation Permit No.: T099-6061-00004	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 15, 2000  <b>Expiration Date:</b>

2. A.1 (General Information) has been revised to include a rule cite for the definition of a major source in 326 IAC 2-7.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] **[326 IAC 2-7-1(22)]**

3. The emission unit descriptions in Section A.2 and D.3 of the permit have been changed as follows:

- (1) A natural gas combustion unit with heat input equal to or less than ten million (10,000,000) Btu per hour including:  
One (1) ~~6.9~~ **3.3** mmBtu per hour natural gas fired boiler.

4. Condition D.3.1, on page 33 of 39 of the permit, has been revised as follows as this new boiler is subject to the requirements of 326 IAC-6-2-4. The changes are as follows:

D.3.1 Particulate Matter (PM) [326 IAC ~~6-2-3(d)~~ **6-2-4**]

Pursuant to 326 IAC 6-2-3(d)~~6-2-4~~ (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the ~~six and nine tenths (6.9)~~ **three and three tenths (3.3)** mmBtu per hour heat input boiler shall be limited to ~~eight tenths (0.8)~~ **six tenths (0.6)** pounds per mmBtu heat input.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Phillip Ritz, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for extension (3-6878), or dial (973) 575-2555, extension 3241.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments  
PR/EVP

cc: File - Marshall County  
U.S. EPA, Region V  
Marshall County Health Department  
Air Compliance Section Inspector Paul Karkiewicz  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michelle Boner

**PART 70 OPERATING PERMIT  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**DOORCRAFT OF INDIANA  
2526 NORTH WESTERN AVENUE  
PLYMOUTH, INDIANA 46563-1000**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T099-6061-00004	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 15, 2000  Expiration Date:
First Administrative Amendment: 099-12170-00004 Second Administrative Amendment: 099-12584-00004	Issuance Date: May 1, 2000 Issuance Date: August 31, 2000
Third Administrative Amendment 099-12904-00004	Pages Affected: 5, 33
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary plant to mill and surface coat wood doors.

Responsible Official: Mr. Jeff Schultz  
Source Address: 2526 North Western Avenue, Plymouth, Indiana 46563-1000  
Mailing Address: 2526 North Western Avenue, Plymouth, Indiana 46563-1000  
SIC Code: 2431  
County Location: Marshall County  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major, under PSD;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) Two (2) surface coating operations for coating wood products identified as follows:
  - (a) EU-01 stationary spray booth, constructed in 1959, with HVLP, air, and airless spray guns and a maximum capacity of coating 312.5 doors per hour, with dry filters for particulate control, exhausting to stack vent S-7 and a rollcoating line or adhesive application with a maximum capacity of coating 358.5 doors per hour, exhausting to G.V.
  - (b) EU-02 rollcoating line, constructed in 1970, consisting of three spray booths, identified as SB-2, SB-3 and SB-4. SB-2 and SB-3 have a maximum capacity of coating 23,250 square feet per hour, exhausting to stack vent S-1, 2, 4, 5, 6, and G.V. The rollcoating line also includes a portable spray booth (SB-4), constructed in 1993, with airless spray guns with a maximum capacity of coating 13,340 square feet per hour, with dry filters for particulate control, exhausting to stack vent S-3.

### A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) A natural gas combustion unit with heat input equal to or less than ten million (10,000,000) Btu per hour including:  
One (1) 3.3 mmBtu per hour natural gas fired boiler.
- (2) Woodworking, identified as EU-05 with one (1) baghouse for particulate control with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grain per dry standard cubic feet of outlet air

## SECTION D.3

## FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-7-5(15)]:** A natural gas combustion unit with heat input equal to or less than ten million (10,000,000) Btu per hour including:

One (1) 3.3 mmBtu per hour natural gas fired boiler.

*The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.*

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-3(d)6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the three and three-tenths (3.3) mmBtu per hour heat input boiler shall be limited to six-tenths (0.6) pounds per mmBtu heat input.

### Compliance Determination Requirement

#### D.3.2 Testing Requirements [326 IAC 2-7-6(1), (6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the particulate matter limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## Appendix A: Emissions Calculations

Page 1 of 1 App A

### Natural Gas Combustion Only

MM BTU/HR <100

### Small Industrial Boiler

**Company Name:** Doorcraft of Indiana

**Address City IN Zip:** 2526 North Western Avenue Plymouth, Indiana 46563-1000

**AA:** 099-12904-00004

**Reviewer:** Phillip Ritz/EVP

**Date:** October 31, 2000

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

3.3

28.9

Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.03	0.11	0.01	1.45	0.08	1.21

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).